DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-012704
Date Inspected: 14-Mar-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:
CWI Present: ☐ Yes ☑ No

Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No	☑ N/A
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Approved WPS:**	☐ Yes	☐ No	☑ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5BE (FL3 to Bottom Plate)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting FL3 flange to the Bottom Plate at Panel Point (PP) 32, PP 33 and PP 34 for Segment 5BW. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00279 Dated March 14, 2010.

Bolt sizes used were M24 x 60 RC Set# DHGM240014 and final torque required was 567 N-m,

Bolt sizes used were M24 x 65 RC Set# DHGM240008 and final torque required was 547 N-m and

Bolt sizes used were M24 x 70 RC Set# DHGM240003 and final torque required was 543 N-m

Manual Torque wrench was been used with Sr. No. XQ2-578.

Note: Few bolts at PP 32, PP 33 and PP 34 bolts not installed due to the temporary bolts been installed. Please refer the pictures attached below for more comprehensive details.

Segment 5AE to 5BE (T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at T-Ribs to T-Ribs at Segment Transverse Splice Side Panel (Cross Beam Side) and Side Panel (Bike Path side) at Panel Point (PP) 31 and PP 32 for Segment 5AE to 5BE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00279 Dated March 14, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220018 and final torque required was 447 N-m (Side Panel Cross Beam Side)

Bolt sizes used were M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m (Bottom Panel)

Manual Torque wrench was been used with Sr. No. XQ2-578. The Offset measured at all the T-Ribs locations for Side Panel performed and noticed at 10th and 11th T-Rib at Side Panel Cross Beam side 5.5mm and 6.5mm offset respectively and at 18th T-Rib at Side Panel Bike Path side offset measured as 5mm and informed ZPMC QC to install 12mm extra splice plate on top of Splice plate which is existing as per RFI No. 0002004 Dated Dec 17, 2009 (numbering reference taken from Longitudinal Diaphragm towards Side Panel).

Manual Torque wrench was been used with Sr. No. XQ2-578.

Note: Bottom Panel T-Ribs bolts tension verification not performed due the temporary sea fasteners been installed. Please refer the pictures attached below for more comprehensive details.

Segment 5AE, 5BE and 5CE (Cable Tray Sling)

This Quality Assurance (QA) Inspector verified tension verification for Cable Tray Sling at PP 29, 30, 31 for Segment 5AE; at PP 33 and PP 34 for Segment 5BE and at PP 35 and PP 36.75 for Segment 5CE. Inspected bolts tension on a random basis by manual pulling and pushing. Inspection was performed against the Notification No. 00281 Dated March 14, 2010.

Note: Few bolts at PP 32 and PP 33 Cable Tray Sling tension verification not performed as Cable Tray not installed due to temporary sea fasteners.

Segment 5AW, 5BW and 5CW (Cable Tray Sling)

This Quality Assurance (QA) Inspector verified tension verification for Cable Tray Sling at PP 29, 30, 31 for Segment 5AW; at PP 32, PP 33 and PP 34 for Segment 5BW and at PP 35 and PP 36.75 for Segment 5CW. Inspected bolts tension on a random basis by manual pulling and pushing. Inspection was performed against the Notification No. 00281 Dated March 14, 2010.

Segment 7BW

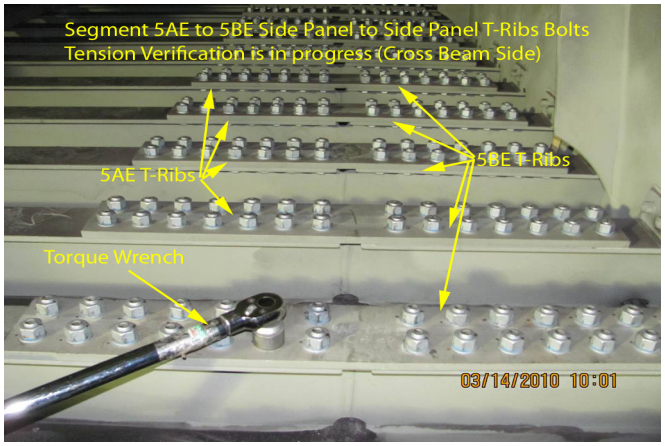
This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from East facing between the U-Ribs to U-Ribs from U-Rib 1 through to 39 for Segment 7BW at Panel Point (PP) 52. Report forwarded to team leader for further action.

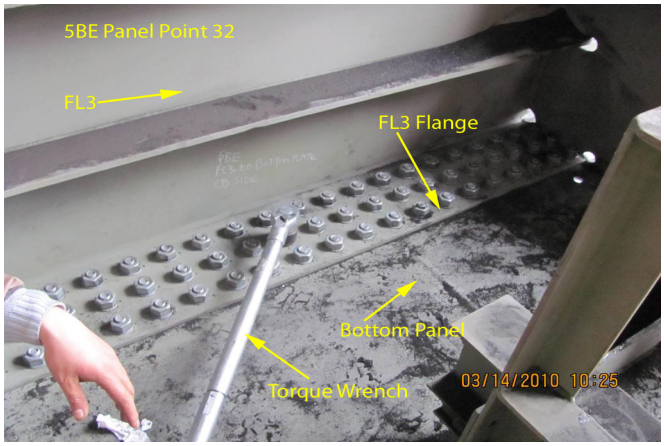
Note: from U-Rib 13 to 26 from West facing reading has to be confirmed after scaffolding.

Segment 7CW

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from West facing between the U-Ribs to U-Ribs from U-Rib 1 through to 39 for Segment 7BW at Panel Point (PP) 53. Report forwarded to team leader for further action.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





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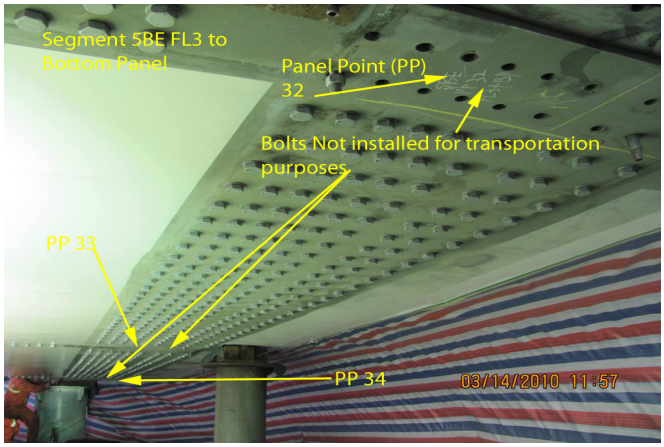

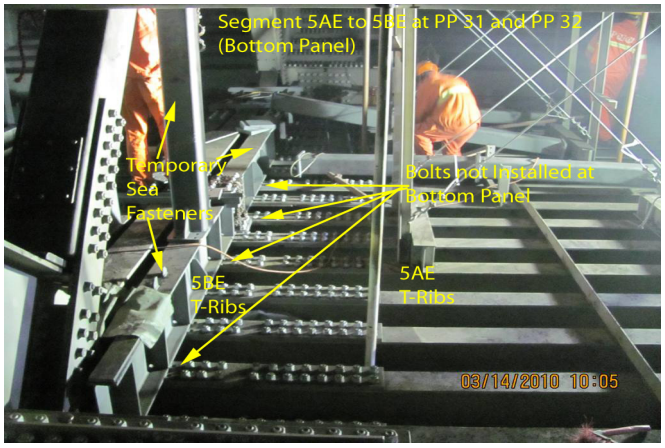

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer